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Safety Information

	The lightning flash with arrow head within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.
	The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THE PROJECTOR TO RAIN OR MOISTURE. DANGEROUS HIGH VOLTAGES ARE PRESENT INSIDE THE ENCLOSURE. DO NOT OPEN THE CABINET.

REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

Class B emissions limits

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Important Safety Instruction

1. Read these instructions –before using this projector.
2. Keep these instructions –for future reference.
3. Follow all instructions.
4. Install in accordance with the manufacturer's instructions :
 - A. **Do not block any ventilation openings.** To ensure reliable operation of the projector and to protect it from overheating, put the projector in a position and location that will not interfere with its proper ventilation. For example, do not place the projector on a bed, sofa, carpet, or similar surface that may block the ventilation openings. Do not put it in an enclosure, such as a bookcase or a cabinet that may keep air from flowing through its ventilation openings.
 - B. **Do not use this projector near water or moisture.** To reduce the risk of fire or electric shock, do not expose the projector to rain or moisture.
 - C. **Do not install near any heat sources,** such as radiators, heaters, stoves or other apparatus (including amplifiers) that produce heat.
5. Clean only with a dry cloth.
6. Only use attachments/accessories specified by the manufacturer.
7. Refer all servicing to qualified service personnel. Servicing is required when the projector has been damaged in any way, such as:
 - ☐ Power supply cord or plug is damaged.
 - ☐ Liquids have spilled or objects have fallen into the apparatus.
 - ☐ The projector has been exposed to rain or moisture, does not operate normally, or has been dropped.



Usage Notice

Do not attempt to service this projector yourself. Opening or removing covers may expose you to dangerous voltages or other hazards. Please call Optoma to be referred to an authorized service center near you.

8. Do not let objects or liquids enter the projector as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.
9. See projector enclosure for safety related markings.
10. The projector should not be adjusted or repaired by anyone except properly qualified service personnel.

Precautions



Please follow all warnings, precautions and maintenance as recommended in this user's guide.



❖ When the lamp reaches the end of its life, the projector will not turn back on until the lamp module has been replaced. To replace the lamp, follow the procedures listed under "Replacing the Lamp" section on page 49.

- Warning - Do not look into the projector's lens when the lamp is on. The bright light may damage your eyes.
- Warning - To reduce the risk of fire or electric shock, do not expose this projector to rain or moisture.
- Warning - Please do not open or disassemble the projector as this may cause electric shock.
- Warning - When replacing the lamp, please allow unit to cool down, and follow all replacement instructions. See pages 49.
- Warning - This projector will detect the life of the lamp itself. Please be sure to change the lamp when it shows warning messages.
- Warning - Use the "Lamp Reset" function from the on-screen display "Options | Lamp Settings" menu after replacing the lamp module (see page 43).
- Warning - When switching the projector off, please ensure the cooling cycle has been completed before disconnecting the power. Allow 90 seconds for the projector to cool down.
- Warning - Do not use the lens cap when projector is in operation.
- Warning - When the lamp is approaching the end of its life, the message "Lamp is approaching the end of its useful life" displays on the screen. Please contact your local reseller or service center to change the lamp as soon as possible.
- Warning - To reduce the risk of injury to the eyes, do not look directly into the laser beam on the remote control and do not point the laser beam into anyone's eyes. This remote control is equipped with a Class II laser that emits radiation.

Do:

- ❖ Turn off the product before cleaning.
- ❖ Use a soft cloth moistened with a mild detergent to clean the display housing.
- ❖ Disconnect the power plug from the AC outlet if the product is not being used for a long period of time.

Don't:

- ❖ Do not block the ventilation slots and openings on the unit.
- ❖ Do not use abrasive cleaners, waxes or solvents to clean the unit.
- ❖ Do not use under the following conditions:
 - In extremely hot, cold or humid environments. Ensure that the ambient room temperature is within 5-40 °C and relative humidity is 10-85% (max.), non-condensing.
 - In areas susceptible to excessive dust and dirt.
 - Near any appliance that generates a strong magnetic field.
 - In direct sunlight.

Eye Safety Warnings



- Avoid staring directly into the projector's beam of light at all times.
- Minimize standing facing into the beam. Keep your back to the beam as much as possible.
- Using a stick or laser pointer is recommended to avoid the need for the presenter to enter the beam.
- Ensure that projectors are located out of the line of sight from the screen to the audience; this ensures that, when presenters look at the audience, they do not also have to stare at the projector lamp. The best way to achieve this is by ceiling-mounting the projector rather than placing it on floor or table top.
- When projector is used in a classroom, adequately supervise students when they are asked to point out something on the screen.
- In order to minimize the lamp power needed, use room blinds to reduce ambient light levels.

Product Features

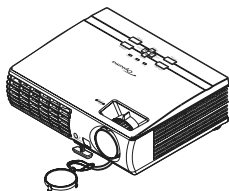
This product is a single chip 0.55" XGA series and 0.65" WXGA series DLP® projector. Outstanding features include:

- ◆ Texas Instruments Single chip DLP® Technology
- ◆ Computer Compatibility:
 - Apple Macintosh, iMac, and VESA Standards:
 - UXGA, SXGA+, SXGA, WXGA, WUXGA, XGA, SVGA, VGA
- ◆ Video Compatibility:
 - NTSC, NTSC4.43
 - PAL/PAL-M/PAL-N/SECAM
 - SDTV and EDTV compatible
 - HDTV compatible (720p, 1080i, 1080p)
- ◆ Auto source detection with user definable settings
- ◆ Fully featured IR remote control with laser pointer and mouse control
- ◆ User friendly multilingual On Screen Menu
- ◆ Advanced digital keystone correction and high quality full screen image re-scaling
- ◆ User friendly control panel
- ◆ One built-in speaker with 1 Watt amplifier
- ◆ Macintosh and PC compatible
- ◆ HDMI 1.3 compatible

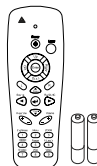
Introduction

Package Overview

This projector comes with all the items shown below. Check to make sure your unit is complete. Contact your dealer immediately if anything is missing.



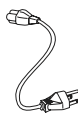
Projector with lens cover



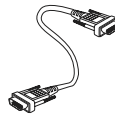
IR Remote Control
(with 2 x AAA Batteries)



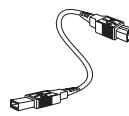
Composite cable
(RCA)



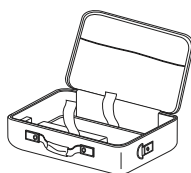
Power Cord
1.8m



VGA Cable
1.8m



USB Cable
1.8m



Carrying Case

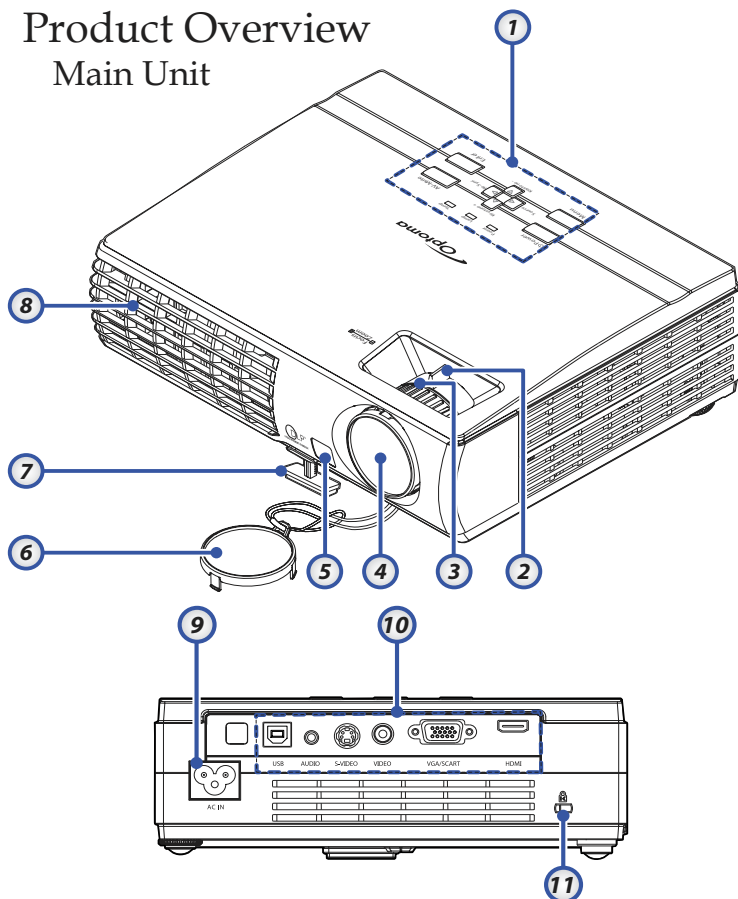


❖ Due to the difference in applications for each country, some regions may have different accessories.

Documentation:

- ☒ User's Manual
- ☒ Warranty Card
- ☒ Quick Start Card
- ☒ WEEE Card

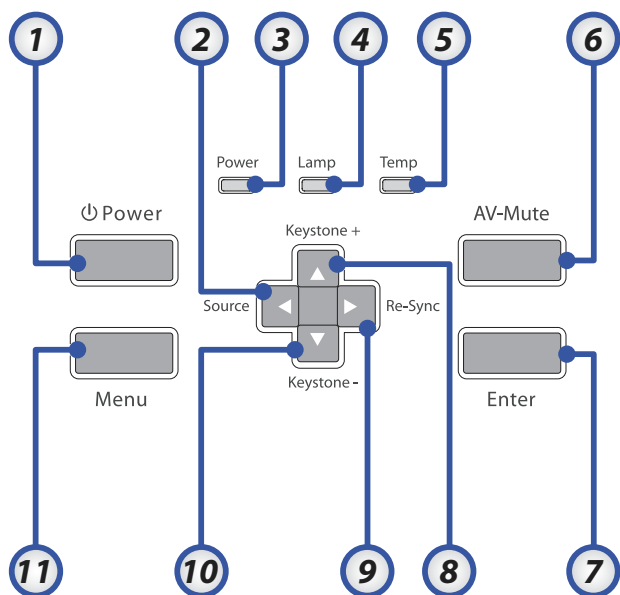
Product Overview Main Unit



- | | |
|----------------------|----------------------|
| 1. Control Panel | 8. Ventilation |
| 2. Zoom | 9. Power Socket |
| 3. Focus | 10. Connection Ports |
| 4. Lens | 11. Kensington™ Lock |
| 5. Front IR Receiver | |
| 6. Lens Cover | |
| 7. Elevator foot | |

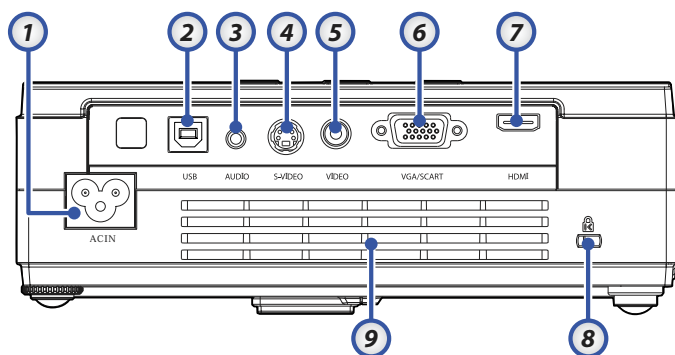
Introduction

Control Panel



- | | |
|-----------------------------|----------------------------------|
| 1. Power | 7. Enter |
| 2. ◀/Source
(Left arrow) | 8. ▲/Keystone+
(Up arrow) |
| 3. Power LED | 9. ▶/Re-Sync
(Right arrow) |
| 4. Lamp LED | 10. ▼/Keystone -
(Down arrow) |
| 5. Temp LED | 11. Menu |
| 6. AV-Mute | |

Rear View

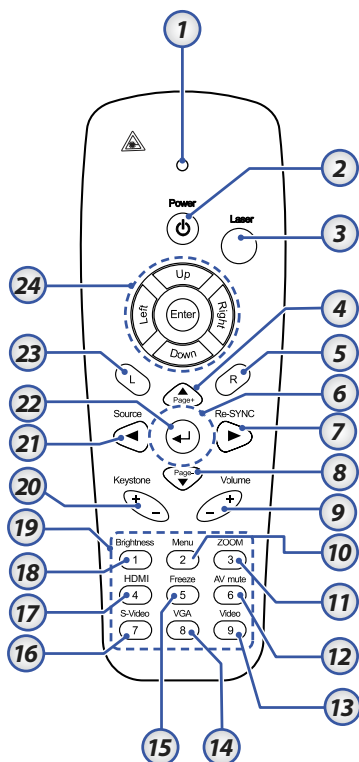


1. AC IN (Power)
2. USB Connector
3. Audio Input Connector
4. S-Video Input Connector
5. Video Input Connector
6. VGA/SCART Input Connector
7. HDMI Connector
8. Kensington™ Lock Port
9. Ventilation Opening

Introduction

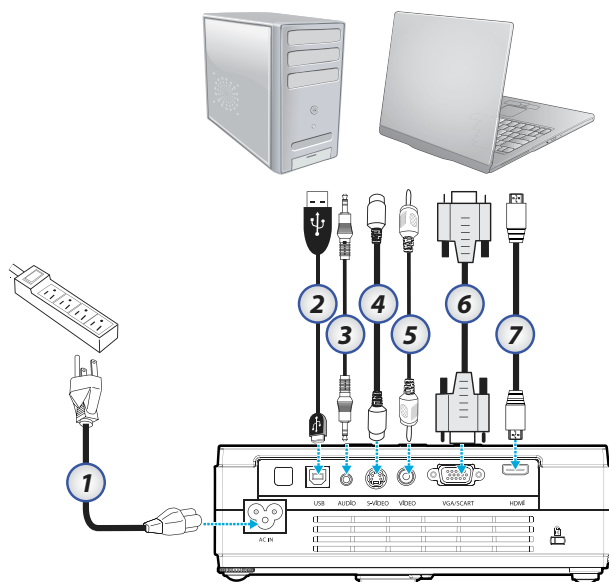
Remote Control

1. Button LED
2. Power On/Off
3. Laser Button
4. Page Up
5. Mouse Right Click
6. Four Directional Select Keys
7. Re-Sync
8. Page Down
9. Volume +/-
10. Menu
11. Zoom
12. AV mute
13. Video Source
14. VGA Source
15. Freeze
16. S-Video Source
17. HDMI
18. Brightness
19. Number Buttons (for password input)
20. Keystone +/-
21. Source
22. Enter
23. Mouse Left Click
24. PC/Mouse control



Connecting the Projector

Connect to Computer / Notebook

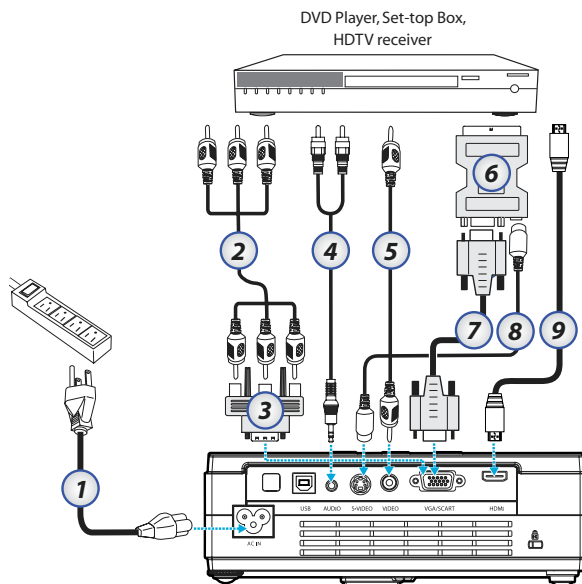


❖ Due to the difference in applications for each country, some regions may have different accessories.

1. Power Cord
2. USB Cable
3. Audio-in (mini jack)
4. S-Video Cable
5. Video Cable
6. VGA Cable
7. HDMI Cable

Installation

Connect to Video Sources



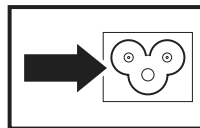
❖ Due to the difference in applications for each country, some regions may have different accessories.

1. Power Cord
2. Component Cable (optional)
3. RGB to Component Adapter (optional)
4. Stereo system cable (optional)
5. RCA Video Cable
6. SCART to RGB & S-Video Adapter (optional)
7. VGA Cable
8. S-Video Cable (optional)
9. HDMI Cable

Powering On / Off the Projector

Powering On the Projector

1. Connect the power cord to the projector.
2. Turn On the connected devices.



- ❖ Turn on the projector first and then select the signal sources.

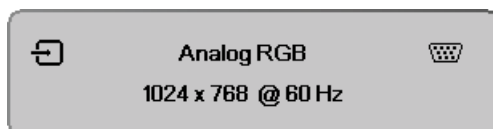
3. Ensure the Power LED is steady (flashing) and then press the Power button to turn On the projector.

The projector splash screen displays and connected devices are detected. If the connected device is a PC, press the appropriate keys on the computer keyboard to switch the display output to the projector. (Check the user manual of the PC to determine the appropriate Fn key combination to change display output.)

See Setting an Access Password (Security Lock) on page 37 if security lock is enabled.

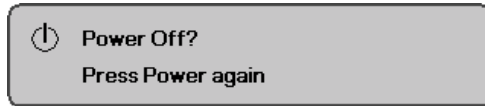


4. If more than one input device is connected, press the “Source” button to switch between devices sequentially.
For direct source selection, see page 21.
(DVD and HDTV are supported through the VGA connector)



Powering Off the Projector

1. Press **POWER** to turn off the projector lamp, a message displays on the projector's screen.



2. Press **POWER** again to confirm, otherwise the message disappears after 15 seconds.
3. The cooling fans continue to operate for about 10 seconds for cooling cycle.
(If you wish to turn the projector back on, you must wait until the projector has completed the cooling cycle and has entered standby mode. Once in standby mode, simply press **POWER** to restart the projector.)
4. Turn off the main power switch. Disconnect the power cord from the electrical outlet and the projector.
5. Do not turn on the projector immediately following a power off procedure.

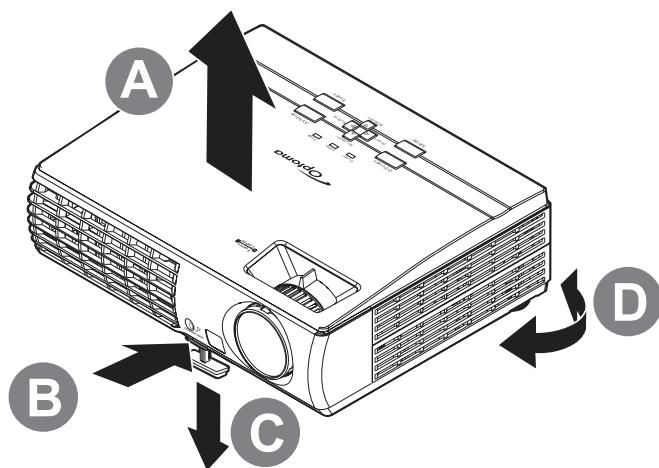
Warning Indicator

- ❖ When the POWER LED indicator repeatedly blinks five (5) times, the projector will automatically shut itself down. Please contact your local reseller or service center. See pages 54-55.
- ❖ When the TEMP LED is on a steady (not flashing) orange, the projector will automatically shut itself down. Under normal conditions, the projector can be switched on again after it has cooled down. If the problem persists, you should contact your local dealer or our service center. See pages 54-55.
- ❖ When the POWER LED repeatedly blinks six (6) times in conjunction with the LAMP LED blinking a single time, it indicates the fan has failed. Please contact your local dealer or our service center. See pages 54-55.

Adjusting the Projected Image Adjusting the Projector's Height

Take note of the following when setting up the projector:

- The projector table or stand should be level and sturdy.
- Position the projector so that it is perpendicular to the screen.
- Ensure the cables are in a safe location. You could trip over them.



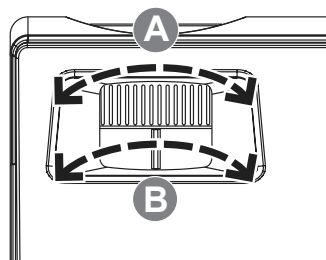
1. To raise the level of the projector, lift the projector [A] and press the height-adjuster button [B].

The height adjuster drops down [C].

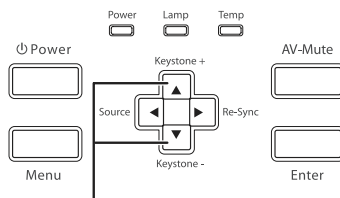
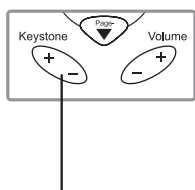
2. To lower the level of the projector, press the height-adjuster button and push down on the top of the projector.
3. To adjust the angle of the picture, turn the tilt adjuster [D] right or left until desired angle achieved.

Adjusting the Zoom / Focus

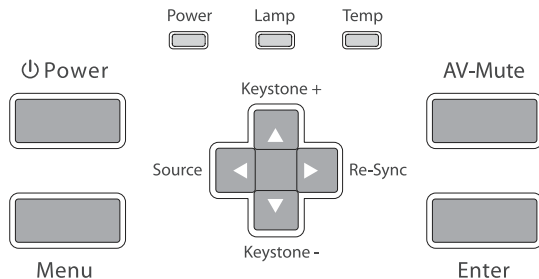
1. Use the Image-zoom control (on the projector only) to resize the projected image and screen size [B].
2. Use the Image-focus control (on the projector only) to sharpen the projected image [A].



3. Use the keystone buttons to correct image distortion. They can be found on the remote control and on the projector's control panel.



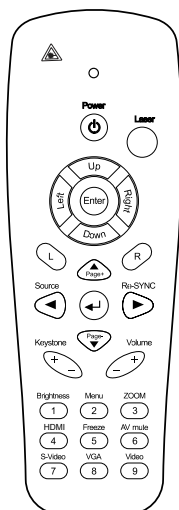
Control Panel










Using the Control Panel

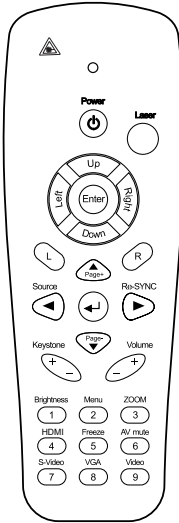
Power	Refer to the “Power On/Off the Projector” section on page 15.	
Menu	Press Menu to launch the on-screen display (OSD) menu. To exit OSD, Press Menu again.	
▲ / Keystone+ (Up arrow)	<ul style="list-style-type: none"> • Adjust the image Keystone positively. • Navigates and changes settings in the OSD. 	
► / Re-Sync (Right arrow)	<ul style="list-style-type: none"> • Automatically synchronizes the projector to the input source. • Navigates and changes settings in the OSD. 	
▼ / Keystone - (Down arrow)	<ul style="list-style-type: none"> • Adjust the image Keystone negatively. • Navigates and changes settings in the OSD. 	
◄ / Source (Left arrow)	<ul style="list-style-type: none"> • Press Source to select an input signal. • Navigates and changes settings in the OSD. 	
AV-Mute	Momentarily turns off / on the audio and video.	
Enter	Confirm your item selection.	
Power LED	Green	Unit is powered on and working correctly.
	Flashing Green	Unit is on stand-by/cooling down.
	Off	Unit is powered off.
Lamp LED	On	Lamp not ready – do not press the power button.
	Off	Lamp is in normal state.
Temp LED	On	System over temperature
	Off	Normal state

Remote Control



Using the Remote Control

Power		Refer to the "Power On/Off the Projector" section on page 15.
Laser		Aim the remote at the viewing screen, press and hold this button to activate the laser pointer.
Four Directional Select Keys		Use     to select items or make adjustments to your selection.
PC / Mouse control		The PC/Mouse control can be used to control mouse movement. The mouse function is enabled using the USB cable to connect your computer and the projector.
L Button		Mouse left click.
R Button		Mouse right click.
Page +		Use this button to page up.
Page -		Use this button to page down.
		Confirm your item selection.
Source		Press Source to select an input signal.
Re-Sync		Automatically synchronizes the projector to the input source.
Keystone +/-		Adjusts image distortion caused by tilting the projector. (± 30 degrees)
Volume +/-		Adjusts to increase/decrease the volume.



Using the Remote Control

Brightness	Adjust the brightness of the image.
Menu	Press Menu to launch the on-screen display (OSD) menu. To exit OSD, Press Menu again.
Zoom	Press +/- to zoom in of an image.
HDMI	Press HDMI to choose HDMI source.
Freeze	Press Freeze to pause the screen image.
AV Mute	Momentarily turns off/on the audio and video.
S-Video	Press S-Video to choose S-Video source.
VGA	Press VGA to choose source from VGA- IN connector.
Video	Press Video to choose Composite video source.

On-screen Display Menus

The Projector has multilingual On-screen Display menus that allow you to make image adjustments and change a variety of settings. The projector will automatically detect the source.

How to operate

1. To open the OSD menu, press **Menu** on the Remote Control or Projector Keypad.
2. When OSD is displayed, use ◀▶ keys to select any item in the main menu. While making a selection on a particular page, press ▼ or **Enter** to enter sub menu.
3. Use ▲▼ keys to select the desired item and adjust the settings by ▶ key.
4. Select the next item to be adjusted in the sub menu and adjust as described above.
5. Press **Enter** to confirm, and the screen will return to the main menu.
6. To exit, press **Menu** again. The OSD menu will close and the projector will automatically save the new settings.

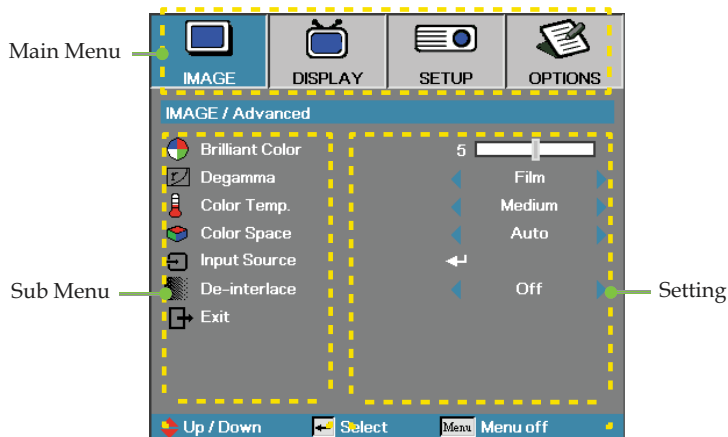
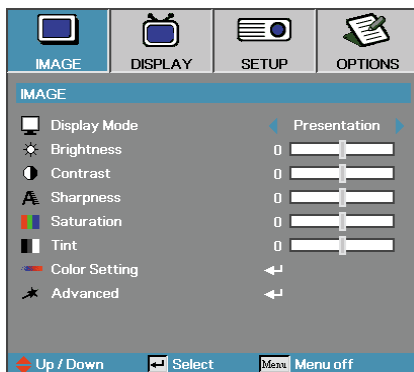


IMAGE	IMAGE COLOR	Display Mode	Presentation/Bright/Movie/sRGB/User1/User2		
		Brightness			
		Contrast			
		Sharpness			
		Saturation			
		Tint			
		Color Setting			
		Advanced			
		IMAGE ADVANCED	Red Gain		
			Green Gain		
Blue Gain					
Red Bias					
Green Bias					
Blue Bias					
Yellow					
Cyan					
Magenta					
Reset					
DISPLAY	DISPLAY	Exit			
		Brilliant Color			
		Degamma	Film/Video/Graphics/PC		
		Color Temp.	Cold / Medium / Warm		
		Color Space	AUTO/RGB/YUV		
		Input Source	VGA/S-Video/Video / HDMI /Exit		
		De-Interlace	Off / On		
		Exit			
		Format	4:3/16:9/4:16/9:16/16:9/16:10/Native/Auto for XGA series 4:3/16:9/16:10/Native/ Auto for WXGA series		
		Overscan			
SETUP	SETUP	Zoom			
		H Image Shift			
		V Image Shift (16:9)			
		V Keystone			
		Language	English/Deutsch/Français/Italiano/Español/Português/ Polski/Nederlands/Svenska/ Norsk/Dansk/Suomi/ ελληνικά/繁體中文/ 简体中文/ 日本語/한국어/Русский/ Magyar/Cestina /عربي /ไทย /Türkçe		
		Projection			
		Menu Location			
		Signal			
		Security			
		Volume			
SETUP SIGNAL	SETUP SIGNAL	Mute			
		Advanced	Logo/Logo Capture/Closed Captioning/Exit		
		Frequency			
		Phase			
		H. Position			
		V. Position			
		Exit			
		SETUP SECURITY	SETUP SECURITY	Security Timer	Month/Day/Hour/Exit
				Change Password	No/ Yes
				Security Settings	Disable/Enable
Exit					
OPTIONS	OPTIONS			Source Lock	Off/On
				High Altitude	Off/On
				Information Hide	Off/On
				Keypad Lock	Off/On
				Background Color	Blue/Black/Red/Green/White
				Advanced	
		Lamp Settings			
		Reset			
		OPTIONS ADVANCED	OPTIONS ADVANCED	Direct Power On	Off / On
				Auto Power Off (min)	
Sleep Timer (min)					
Exit					
OPTIONS LAMP SETTINGS	OPTIONS LAMP SETTINGS			Lamp Hours	
				Lamp Reminder	Off/On
				Brightness Mode	STD/Bright
				Lamp Reset	No/ Yes
				Exit	

Image



Display Mode

There are many factory presets optimized for various types of images.

- ▶ Presentation: Good color and brightness from PC input.
- ▶ Bright: Maximum brightness from PC input.
- ▶ Movie: For home theater.
- ▶ sRGB: Standardised accurate color.
- ▶ User1: User's own settings.
- ▶ User2: User's own settings.

The initial default settings of this mode is from Movie mode. Any further adjustments by the user in User1/2 will be saved in this mode for future use.

Brightness

Adjust the brightness of the image.

- ▶ Press ◀ to darken image.
- ▶ Press ▶ to lighten the image.

Contrast

The contrast controls the degree of difference between the lightest and darkest parts of the picture. Adjusting the contrast changes the amount of black and white in the image.

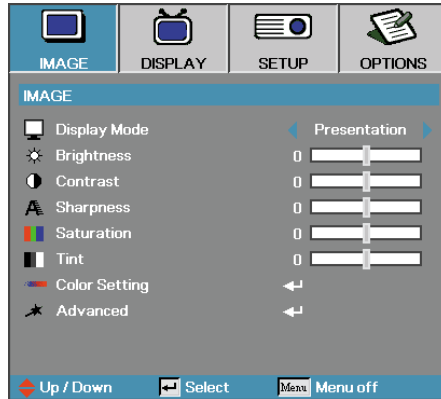
- ▶ Press ◀ to decrease the contrast.
- ▶ Press ▶ to increase the contrast.

Sharpness

Adjusts the sharpness of the image.

- ▶ Press ◀ to decrease the sharpness.
- ▶ Press ▶ to increase the sharpness.

Image



Saturation

Adjusts a video image from black and white to full color saturation.

- ▶ Press ◀ to decrease the amount of saturation in the image.
- ▶ Press ▶ to increase the amount of saturation in the image.

Tint

Adjusts the color balance of red and green.

- ▶ Press ◀ to increase the amount of green in the image.
- ▶ Press ▶ to increase the amount of red in the image.

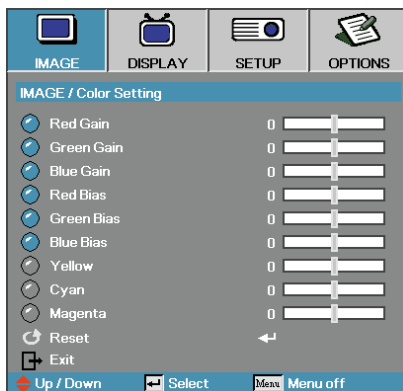
Color Setting

Enter the Color Setting menu. Select the Red/Green/Blue Gain for brightness adjustments and Bias for contrast adjustments for the whole picture. Individual color adjustments for Cyan, Magenta, Yellow can also be adjusted. See page 26 for more details.

Advanced

Enter the Advanced menu. Select advanced display options such as White Peaking, Degamma, Color Temp., Color Space, Input Source, De-Interlace, and Exit. See page 27 for more information.

Image | Color Setting



Gain

Set RGB Gain to adjust the Brightness of the follow in Colors:

- ▶ Red –increase or decrease the gain value for red.
- ▶ Green –increase or decrease the gain value for green.
- ▶ Blue –increase or decrease the gain value for blue.

Bias

Set RGB Bias to adjust the Contrast of the follow in Colors:

- ▶ Red –increase or decrease the bias value for red.
- ▶ Green –increase or decrease the bias value for green.
- ▶ Blue –increase or decrease the bias value for blue.

Color

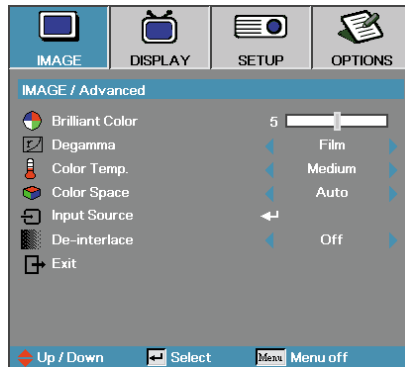
Set values to adjust the level of the following colors:

- ▶ Yellow – increase or decrease the color value for yellow.
- ▶ Cyan – increase or decrease the color value for cyan.
- ▶ Magenta – increase or decrease the color value for magenta.

Reset

Reset all Color Setting values to the factory default.

Image | Advanced



Brilliant Color

This adjustable item utilizes a new color-processing algorithm and system level enhancements to enable higher brightness while providing true, more vibrant colors in picture. The range is from 0 to 10. If you prefer a stronger enhanced image, adjust toward the maximum setting. For a smoother, more natural image, adjust toward the minimum setting.

Degamma

This allows you to choose a degamma table that has been fine-tuned to bring out the best image quality for the input.

- ▶ Film—for home theater.
- ▶ Video—for video or TV source.
- ▶ Graphics—for image source.
- ▶ PC—for PC or computer source.

Color Temp

Adjust the color temperature. Cold temperature, the screen looks colder; with Warm temperature, the screen looks warmer.

Color Space

Select an appropriate color matrix type from AUTO, RGB, YUV.

Input Source

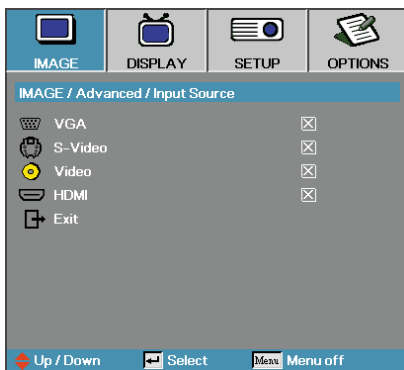
Enter the Input Source submenu. Select the sources to scan for at startup. See page 28 for more information.

De-interlace

Press the cursor ◀ or ▶ button to select different De-interlace modes. This function converts an interlaced video signal into progressive signal.

- ▶ On: Automatically switch the De-interlace mode and Film mode.
- ▶ Off: Switch De-interlace mode to video mode for video source or TV source.

Image | Advanced | Input Source

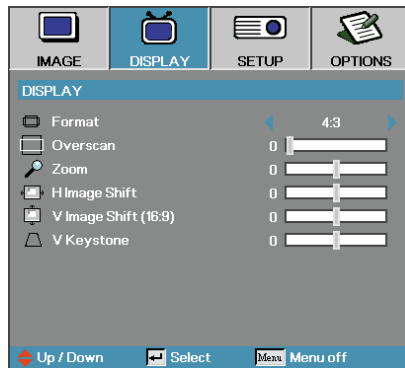


- ❖ If all sources are deselected, the projector cannot display any images. Always leave at least one source selected.

Input Source

Use this option to enable / disable input sources. Press ◀ or ▶ into the next menu as below and then use ▲ or ▼ to select. Press **Enter** to finalize the selection. The projector will not search inputs that are de-selected.

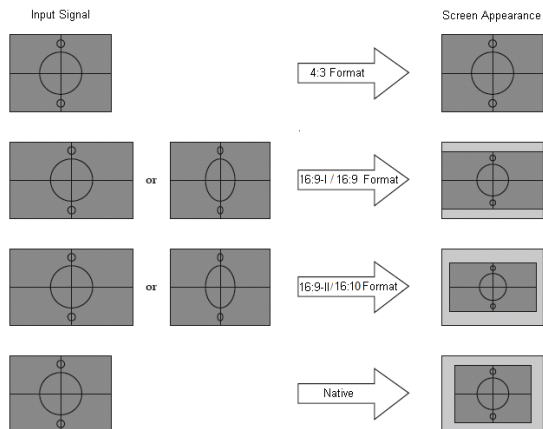
Display



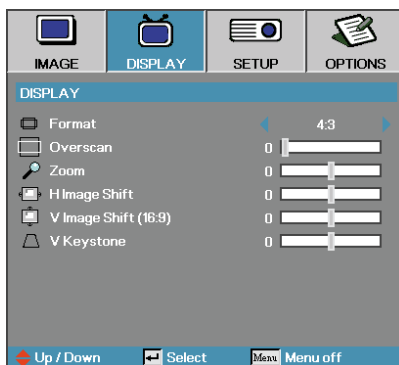
Format

Use this function to choose your desired aspect ratio.

- ▶ 4:3: This format is for 4x3 input sources not enhanced for Wide screen TV.
- ▶ 16:9 I (XGA series)/16:9 (WXGA series): This format is for 16x9 input sources, like HDTV and DVD enhanced for Wide screen TV.
- ▶ 16:9 II (XGA series)/16:10 (WXGA series): The non-standard wide-screen display format of the projector. Part of the original image will be cut if the image aspect ratio is less than 1.67:1.
- ▶ Native: Depends on the resolution of the input source – No scaling is performed.
- ▶ Auto: Automatically selects the appropriate format.



Display



Overscan

Overscan function removes the noise in a video image. Overscan the image to remove video encoding noise on the edge of video source.

Zoom

- ▶ Press ◀ to reduce the size of the image.
- ▶ Press ▶ to magnify an image on the projected screen.

H Image Shift

Shifts the projected image position horizontally.

- ▶ Press ◀ to move the image left on the projected screen.
- ▶ Press ▶ to move the image right on the projected screen.

V Image Shift (16:9 only)

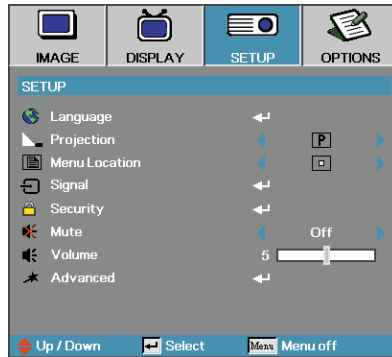
Shifts the projected image position vertically (in 16:9 format only).

- ▶ Press ▶ to move the image up on the projected screen.
- ▶ Press ◀ to move the image down on the projected screen.

V Keystone

Press ◀ or ▶ to compensate for vertical image distortion when the projector is positioned at an angle to the screen.

Setup



Language

Enter the Language menu. Select the multilingual OSD menu.
See page 33 for more information.

Projection

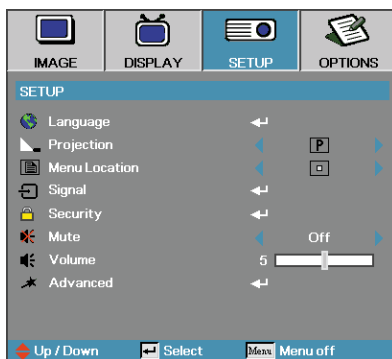
Select projection method:

- ▶ **[P]** Front Desktop
The factory default setting.
- ▶ **[9]** Rear Desktop
When you select this function, the projector reverses the image so you can project behind a translucent screen.
- ▶ **[d]** Front Ceiling
When you select this function, the projector turns the image upside down for ceiling-mounted projection.
- ▶ **[b]** Rear Ceiling
When you select this function, the projector reverses and turns the image upside down at same time. You can project from behind a translucent screen with ceiling mounted projection.

Menu Location

Choose the menu location on the display screen.

Setup



Signal

Enter the Signal menu. Set projector signal properties.
See page 34 for more information.

Security

Enter the Security menu. Access the projector's security features.
See page 35 for more information.

Mute

Toggle the audio on or off.

- ▶ Off – the speaker volume is turned on.
- ▶ On – the speaker volume is turned off.

Volume

Press ◀ to decrease the volume of voice.

Press ▶ to increase the volume of voice.




Advanced

Enter the Advanced menu. Select the screen display during startup.
See page 38 for more information.

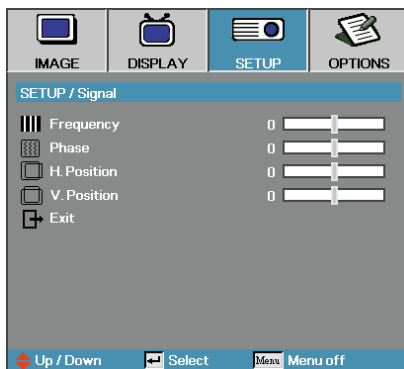
Setup | Language



Language

Choose the multilingual OSD menu. Press **ENTER** () into the sub menu and then use the Left () or Right () key to select your preferred language.

Setup | Signal



Frequency

Change the display data frequency to match the frequency of your computer's graphics card. If you experience a vertical flickering bar, use this function to make an adjustment.

Phase

Phase synchronizes the signal timing of the display with the graphic card. If you experience an unstable or flickering image, use this function to correct it.

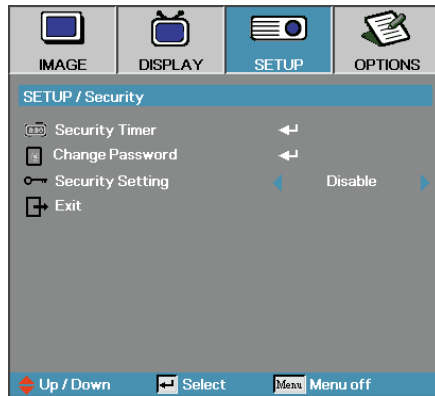
H. Position

- ▶ Press ◀ to move the image left.
- ▶ Press ▶ to move the image right.

V. Position

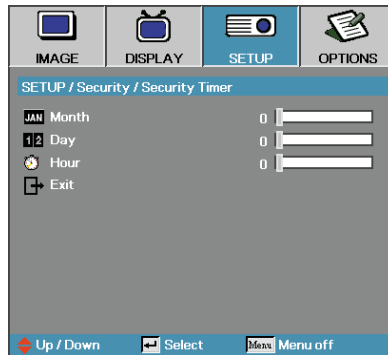
- ▶ Press ◀ to move the image down.
- ▶ Press ▶ to move the image up.

Setup | Security



Security Timer

Enter the Security Timer sub menu.

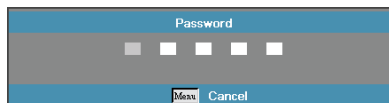


- ❖ No password is required to access Setup | Security unless the Security Timer or Security Setting are enabled.

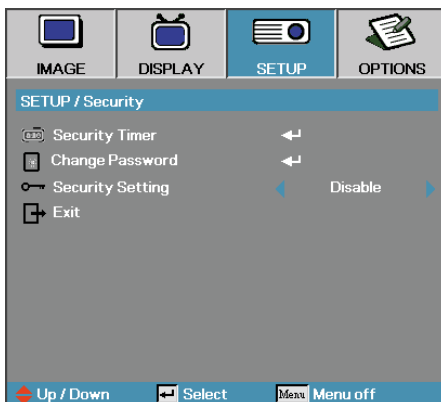
Enter the Months, Days, and hours that the projector can be used without entering the password. Exiting to the Setup menu activates the Security Timer.

Once activated, the projector requires a password on the specified dates and times to allow power on and access to the security menu.

If the projector is in use and the Security Timer is active, the following screen displays 60 seconds before the password is required.



Setup | Security

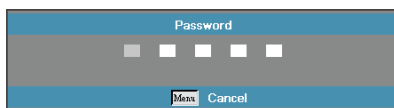


- ❖ If the incorrect password is entered three times, the device auto shutdowns after 10 seconds.

Change Password

Use this submenu to change the security password for the projector.

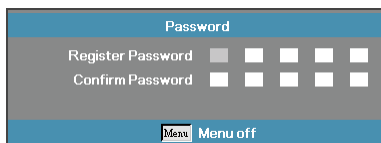
1. Select Change Password from the Security submenu. The Confirm Change Password dialog box displays.
2. Select **Yes**.



3. Enter the default password <1> <2> <3> <4> <5>.
A second password screen displays.

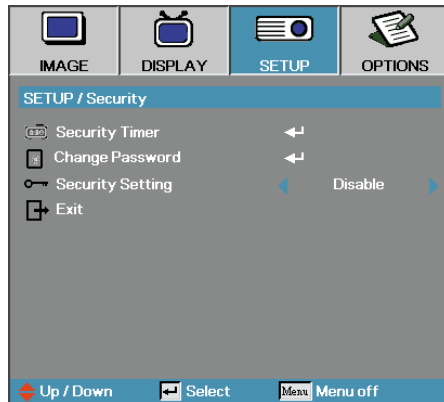


- ❖ If the new passwords do not match, the password screen redisplay.



4. Enter the new password twice for verification.

Setup | Security

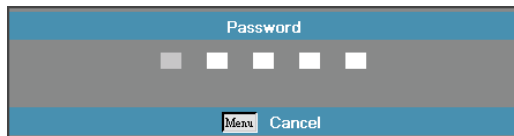


Security Setting

Enable or disable the security password.

- ▶ Enabled – the current password is required to power on the projector and access the Security menu.
- ▶ Disabled – no password is required for any function.

When security is enabled, the following screen displays at startup and before access to the Security menu is allowed:



Setup | Advanced



Logo

Select the screen to display during startup.

- ▶ Optoma—the supplied default startup screen.
- ▶ User—customized screen capture using the Logo Capture function.

Logo Capture

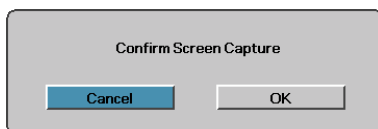
Capture a displayed screen to use as the startup screen.

1. Display the desired screen on the projector.
2. Select Logo Capture from the Advanced menu.

A confirmation screen displays.



- ❖ Only one startup screen can be saved at once. Subsequent captures overwrite previous files limited in 1.5MB.



3. Select **OK**. Screen capture in progress.

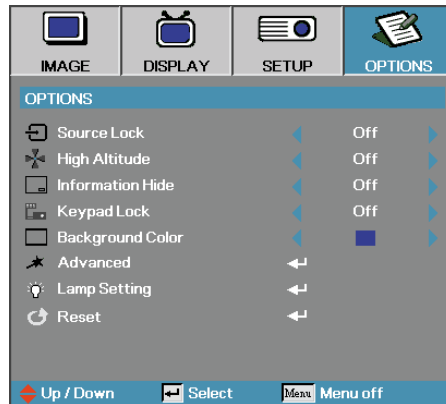
Screen capture succeeded displays. The captured screen is saved as **User** in the Logo menu.

Closed Captioning

Select the screen to display closed captioning

- ▶ Off—the supplied default setting.
- ▶ On—closed captioning text is displayed if available.

Options



Source Lock

Lock the current source as the only available source, even if the cable is unplugged.

- ▶ On—only the current source is recognized as an input source.
- ▶ Off—all sources selected in Image | Advanced | Input Source are recognized as an input source.

High Altitude

Adjust the fan speed to reflect the environment.

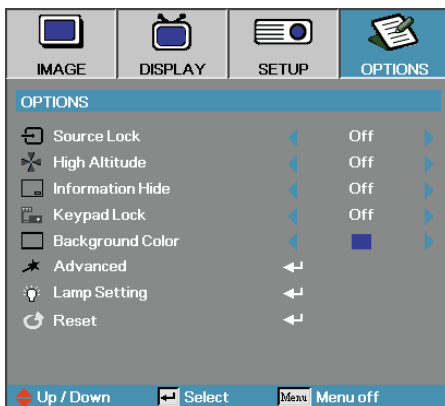
- ▶ On—increases fan speed for high temperature, humidity, or altitude.
- ▶ Off—regular fan speed for normal conditions.

Information Hide

Suppress informational messages on the projected screen.

- ▶ On—no status messages appear on screen during operation.
- ▶ Off— status messages appear as normal on screen during operation.

Options



Keypad Lock

Lock the buttons on the projector top panel.

- On—a warning message displays to confirm keypad lock.

 Hold *ENTER* key on keypad for 5 seconds to unlock keypad

- Off—projector keypad functions as normal.

Background Color

Select the desired background color for the projected image when no source is detected.

Advanced

Enter the Advanced menu. See page 41 for more details.

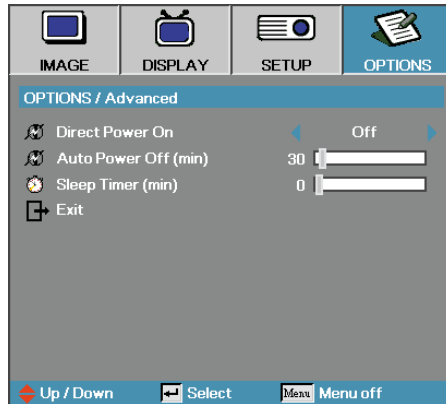
Lamp Setting

Enter the Lamp Setting menu. See pages 42-43 for more details.

Reset

Reset all Options to default factory settings.

Options | Advanced



Direct Power On

Enable or disable Direct Power On.

- ▶ On—the projector powers on automatically when AC power is supplied.
- ▶ Off—the projector must be powered on as normal.

Auto Power Off

Set the Auto Power Off interval. The projector powers off the lamp after 30 minutes of no signal by default. The following warning is displayed 60 seconds before power off.

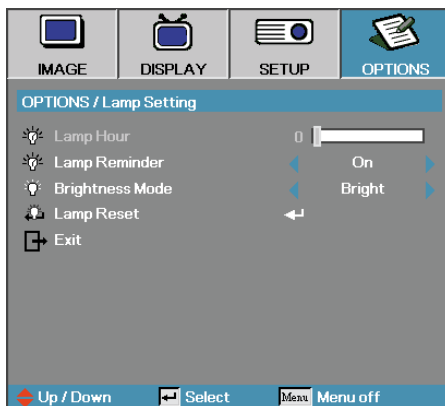
The projector will automatically shutdown after 60 sec.

Sleep Timer

Set the Sleep Timer interval. The projector powers off after the specified time period of inactivity (regardless of signal). The following warning is displayed 60 seconds before power off.

The projector will automatically shutdown after 60 sec.

Options | Lamp Setting



Lamp Hour

Displays the number of hours the lamp has been active. This item is for display only.

Lamp Reminder

Enable or disable the lamp life span reminder.

- ▶ On—a warning message displays when remaining lamp life is less than 30 hours.



Lamp is approaching the end of its useful life

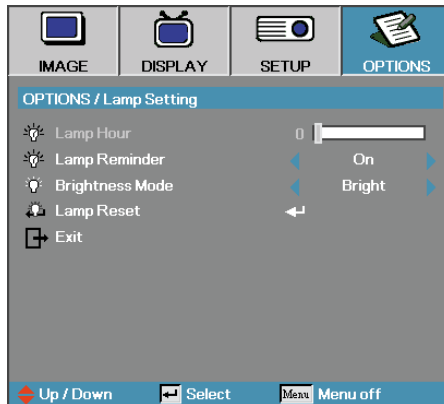
- ▶ Off—no warning message displays.

Brightness Mode

Select the lamp brightness mode.

- ▶ Bright—the default setting.
- ▶ STD—lower brightness setting to conserve lamp life.

Options | Lamp Setting

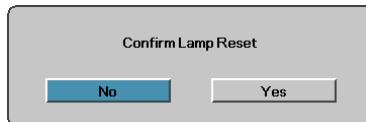


Lamp Reset

After replacing the lamp, reset the lamp counter to accurately reflect the new lamp's life span.

1. Select Lamp Reset.

A confirmation screen displays.



2. Select **Yes** to reset the lamp counter to zero.

Troubleshooting

If you experience a problem with your projector, please refer to the following information. If a problem persists, please contact your local reseller or service center.

Image Problems

No image appears on-screen

- ▶ Ensure all the cables and power connections are correctly and securely connected as described in the **Installation** section.
- ▶ Ensure all the pins of connectors are not bent or broken.
- ▶ Check if the projection lamp has been securely installed. Please refer to the **Replacing the lamp** section.
- ▶ Make sure you have removed the lens cap and the projector is switched on.

Partial, scrolling or incorrectly displayed image

- ▶ Press “Re-Sync” on the remote.
- ▶ If you are using a PC:
For Windows 95, 98, 2000, XP:
 1. Open the **My Computer** icon, the **Control Panel** folder, and then double click on the **Display** icon.
 2. Select the **Settings** tab.
 3. Verify that your display resolution setting is lower than or equal to UXGA (1600 x 1200).
 4. Click on the **Advanced Properties** button.
If the projector is still not projecting the whole image, you will also need to change the monitor display you are using. Refer to the following steps.
 5. Verify the resolution setting is lower than or equal to UXGA (1600 x 1200).
 6. Select the **Change** button under the **Monitor** tab.
 7. Click on **Show all devices**. Next, select **Standard monitor types** under the SP box; choose the resolution mode you need under the “Models” box.
 8. Verify that the resolution setting of the monitor display is lower than or equal to UXGA (1600 x 1200). (*)

- ▶ If you are using a Notebook:
 1. First, follow the steps above to adjust resolution of the computer.
 2. Press the toggle output settings. Example: [Fn]+[F4]

Acer ⇒	[Fn]+[F5]	IBM/Lenovo ⇒	[Fn]+[F7]
Asus ⇒	[Fn]+[F8]	HP/Compaq ⇒	[Fn]+[F4]
Dell ⇒	[Fn]+[F8]	NEC ⇒	[Fn]+[F3]
Gateway ⇒	[Fn]+[F4]	Toshiba ⇒	[Fn]+[F5]

Mac Apple:
System Preference ⇒ Display ⇒ Arrangement ⇒ Mirror display

If you experience difficulty changing resolutions or your monitor freezes, restart all equipment including the projector.

The screen of the Notebook or PowerBook computer is not displaying your presentation

- ▶ If you are using a Notebook:

Some Notebooks may deactivate their own screens when a second display device is in use. Each has a different way to be reactivated. Refer to your computer's manual for detailed information.

Image is unstable or flickering

- ▶ Use **Phase** to correct it. See page 34 for more information.
- ▶ Change the monitor color setting on your computer.

Image has vertical flickering bar

- ▶ Use **Frequency** to make an adjustment. See page 34 for more information.
- ▶ Check and reconfigure the display mode of your graphic card to make it compatible with the projector.

Image is out of focus

- ▶ Make sure the lens cap is removed.
- ▶ Adjusts the Focus Ring on the projector lens.
- ▶ Make sure the projection screen is between the required distances from the projector. See pages 17-18 for more information.



The image is stretched when displaying 16:9 DVD title

When you play anamorphic DVD or 16:9 DVD, the projector will show the best image in 16:9 format in OSD. If you play 4:3 format DVD title, please change the format as 4:3 in projector OSD. If the image is still stretched, you will also need to adjust the aspect ratio by referring to the following:

- ▶ Please setup the display format as 16:9 (wide) aspect ratio type on your DVD player.

Image is too small or too large

- ▶ Adjust the Zoom Ring on the top of the projector.
- ▶ Move the projector closer to or further from the screen.
- ▶ Press [Menu] button on the remote control or projector panel, go to **Display | Format** and try the different settings.

Image has slanted sides

- ▶ If possible, reposition the projector so that it is centered on the screen and below the bottom of the screen.
- ▶ Press [Keystone +/-] on the remote control until the sides are vertical.



❖ Use of Keystone is not recommended.

Image is reversed

- ▶ Select **Setup | Projection** from the OSD and adjust the projection direction.

Intermission Problems

The projector stops responding to all controls

- ▶ If possible, turn off the projector, then unplug the power cord and wait at least 60 seconds before reconnecting power.

Lamp burns out or makes a popping sound

- ▶ When the lamp reaches its end of life, it will burn out and may make a loud popping sound. If this happens, the projector will not turn on until the lamp module has been replaced. To replace the lamp, follow the procedures in Replacing the Lamp on page 49.

Projector Status Indication

Error Code Message	Power LED/ Flashes	Lamp LED/ Flashes
Thermal break status error	4	0
Fan1 error (Power Fan)	6	1
Fan2 error (Lamp Fan)	6	2
Fan3 error (Blower Fan)	6	3
Lamp door sensor detect high	7	0
DMD error	8	0
Color wheel error	9	0

Message Reminders

- ▶ Replacing the lamp:



Lamp is approaching the end of its useful life

- ▶ Out of range: (see the following for more information)



Signal out of range
lower image resolution.

Remote Control Problems

If the remote control does not work

- ▶ Check the operating angle for the remote control is approximately $\pm 15^\circ$.
- ▶ Make sure there are no obstructions between the remote control and the projector. Move to within 7m (23 ft) of the projector.
- ▶ Make sure the batteries are inserted correctly.
- ▶ Replace weak batteries in the remote control.

Audio Problems

There is no sound

- ▶ Adjust the volume on the remote control.
- ▶ Adjust the volume of the audio source.
- ▶ Check the audio cable connection.
- ▶ Test the source audio output with other speakers.
- ▶ Have the projector serviced.

The sound is distorted

- ▶ Check the audio cable connection.
- ▶ Test the source audio output with other speakers.
- ▶ Have the projector serviced.

Replacing the Lamp

The projection lamp should be replaced when it burns out. It should only be replaced with a certified replacement part, which you can order from your local dealer.

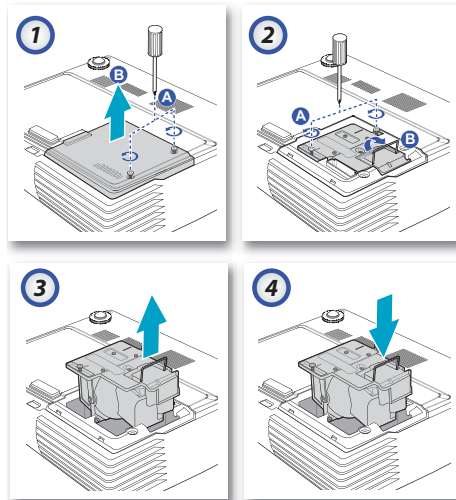
Important:

- ▶ The lamp contains a certain amount of mercury and should be disposed of according to local ordinance regulations.
- ▶ Avoid touching the glass surface of the new lamp, doing so may shorten its operation life.



Warning:

- ▶ Be sure to turn off and unplug the projector at least an hour before replacing the lamp. Failure to do so could result in a severe burn.



1. Loosen the two captive screws on the lamp compartment cover (A). Remove the lamp compartment cover (B).
2. Remove the two screws from the lamp module (A). Lift the module handle up (B).
3. Pull firmly on the module handle to remove the lamp module.
4. 5 & 6. Insertion is the reverse of removal.

After replacing the lamp, the lamp hours counter must be reset. See page 43 for more information.



Cleaning the Projector

Cleaning the projector to remove dust and grime will help ensure trouble-free operation.

Warning:

- ▶ Be sure to turn off and unplug the projector at least an hour before cleaning. Failure to do so could result in a severe burn.
- ▶ Use only a dampened cloth when cleaning. Do not allow water to enter the ventilation openings on the projector.
- ▶ If a little water gets into the projector interior while cleaning, leave unplugged in a well-ventilated room for several hours before using.
- ▶ If a lot of water gets into the projector interior when cleaning, have the projector serviced.

Cleaning the Lens

You can purchase optic lens cleaner from most camera stores. Refer to the following to clean the projector lens.

1. Apply a little optic lens cleaner to a clean soft cloth.
(Do not apply the cleaner directly to the lens.)
2. Lightly wipe the lens in a circular motion.

Caution:

- ▶ Do not use abrasive cleaners or solvents.
- ▶ To prevent discoloration or fading, avoid getting cleaner on the projector case.

Cleaning the Case

Refer to the following to clean the projector case.

1. Wipe off dust with a clean dampened cloth.
2. Moisten the cloth with warm water and mild detergent (such as used to wash dishes), and then wipe the case.
3. Rinse all detergent from the cloth and wipe the projector again.

Caution:

To prevent discoloration or fading of the case, do not use abrasive alcohol-based cleaners.

Compatibility Modes

Computer Compatibility

Signal	Resolution	Refresh Rate (Hz)
NTSC	-	60
PAL/SECAM	-	50
VESA	640 x 350	70.1/ 85.1
	640 x 400	70.1 / 85.1
	720 x 350	70
	720 x 400	70/ 85/ 88
	720 x 576	50/ 60
VGA	640 x 480	60/ 67/ 72.8/ 75/ 85
SVGA	800 x 600	56.3/ 60.3/ 75/ 72.2/ 80/ 85.1
	832 x 624	72/ 75
	1024 x 576	50/ 60
XGA	1024 x 768	60/ 70.1/ 72/ 75/ 85/ 87
	1152 x 864	60/ 70/ 75/85/ 75
	1152 x 870	75
HD720	1280 x 720	50/ 60/ 75/ 85
WXGA	1280 x 768	60/ 70/ 75/ 85
WXGA-800	1280 x 800	60
SXGA	1280 x 1024	60/ 75/85
SXGA+	1400 x 1050	60
UXGA	1600 x 1200	60
	1600 x 1050	60
HD1080	1920 x 1080	24/ 50/ 60/75
WUXGA	1920 x 1200	60/ 75
HDTV	1920 x 1080i	50/ 60
	1920 x 1080p	50/ 60
	1280 x 720p	50/ 60
SDTV	720 x 576i	50
	720 x 576p	50
	720 x 480i	60
	720 x 480p	60

Appendices

Apple Mac Compatibility

Resolution		Macbook	Macbook Pro (Intel)	Power Mac G5	Power Mac G4
	Hz-	Analog	Analog	Analog	Analog
800x600	60	o	o	-	-
800x600	72	o	o	o	o
800x600	75	o	o	o	o
800x600	85	o	o	o	o
1024x768	60	o	o	o	o
1024x768	70	o	o	o	o
1024x768	75	o	o	o	o
1024x768	85	o	o	o	o
1280x720	60	o	o	o	o
1280x720	75	o	o	-	o
1280x720	85	o	o	-	o
1280x768	60	o	o	-	o
1280x768	75	o	o	o	o
1280x768	85	o	o	-	o
1280x800	60	o	o	o	o
1280x1024	60	-	o	o	o
1280x1024	75	-	o	o	-
1680x1050	60	o	o	-	-
1920x1200	60	o	o	-	-

Ceiling Installation



- ❖ Damage to the projector as a result of incorrect installation voids the warranty.

To prevent damage to your projector please use the recommended mounting package for installation.

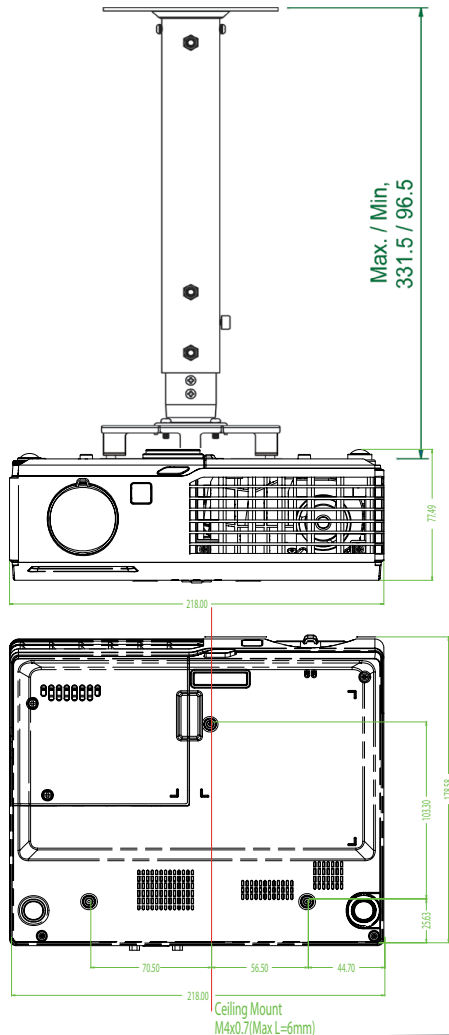
To ensure compliance, only use a UL Listed ceiling mount and screws that meet the following specifications:

M4 x 3 Ceiling Mounts, Maximum length 6mm

Refer to the following diagram to ceiling mount the projector.



- ❖ Ensure at least 10cm clearance between the ceiling and the underside of the projector.
- ❖ Avoid locating the projector near heat sources such as air conditioning and heaters. Excess heat may cause the projector to power off.



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Regulation & Safety notices

This appendix lists the general notices of your projector.

FCC notice

This device has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ▶ Reorient or relocate the receiving antenna.
- ▶ Increase the separation between the device and receiver.
- ▶ Connect the device into an outlet on a circuit different from that to which the receiver is connected.
- ▶ Consult the dealer or an experienced radio/television technician for help.

Notice: Shielded cables

All connections to other computing devices must be made using shielded cables to maintain compliance with FCC regulations.

Caution

Changes or modifications not expressly approved by the manufacturer could void the user's authority, which is granted by the Federal Communications Commission, to operate this projector.

Operation conditions

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Notice: Canadian users

This Class B digital apparatus complies with Canadian ICES-003.

Remarque à l'intention des utilisateurs canadiens

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Declaration of Conformity for EU countries

- ▶ EMC Directive 2004/108/EC (including amendments)
- ▶ Low Voltage Directive 2006/95/EC
- ▶ R & TTE Directive 1999/5/EC (if product has RF function)

Disposal instructions



Do not throw this electronic device into the trash when discarding. To minimize pollution and ensure utmost protection of the global environment, please recycle it.